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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,927	11/02/2000	Junji Shirai	PM 275275	3768

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EXAMINER

YOON, TAE H

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 05/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/703,927

Applicant(s)

Shirai et al

Examiner

T. Yoon

Group Art Unit

1714

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 4-8-03 2 4-28-03

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

☒ Claim(s) 1-4 is/are pending in the application.

Of the above claim(s) is/are withdrawn from consideration.

☐ Claim(s) is/are allowed.

☒ Claim(s) 1-11 is/are rejected.

☐ Claim(s) is/are objected to.

☐ Claim(s) are subject to restriction or election requirement

## Application Papers

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some\* ☐ None of the:

☒ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

☐ Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other \_\_\_\_\_

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This is New Matter rejection since the recited “--- a dielectric breakdown strength of at least 21.1 kV/mm” does not have support in the specification. The comparative example 1 of table 1 on page 11 of the specification shows said 21.1 kV/mm, but it is not applicant’s invention. Also said “at least 21.1 kV/mm” does not have any upper limit which can be any value such as 100 kV/mm which has no support. The specification has support for 21.9-22.7 kV/mm only.

Also, the recited “a tensile modulus of at least 2.59 GPa” does not have support in the specification either since the table 1 only supports “2.59-3.62 GPa”. Said “at least 2.59 GPa” does not have any upper limit which can be any value such as 200 GPa which has no support.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited “--- a dielectric breakdown strength of at least 21.1 kV/mm” and “a tensile modulus of at least 2.59 GPa” are indefinite since there are no upper limits taught in the specification. Thus, the coverage sought by applicant is unclear.

Also, the recited values are indefinite in not specifying particular testing methods and/or a sample size since said values are dependent on particular testing methods and/or a sample size. Note that the examples of Rule 132 Declaration using a sheet having a thickness of 1mm have yielded much higher values of a dielectric breakdown strength than the examples of table 1 (page 11) using a sheet having a thickness of 0.7mm.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abolins (US 4,692,490) in view of Takekoshi et al (US 5,707,439 or 5,530,052) and further in view of Pinnavaia et al (US 6,096,803) or Vaia et al (US 6,225,374).

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Rejection is maintained for reason of record and following.

Claim 1 further recites mono-layer particles of the organic clay, however, said mono-layer particles of the organic clay in an extrusion molded article are well known in the art as taught by Pinnavaia et al (abstract and Fig. 1C) or Vaia et al (abstract). Thus, said mono-layer particles of the organic clay are well expected.

Applicant's statement regarding "normalized" amounts in the examples of the Rule 132 Declaration is understood. However, a comparison must be based on the composition of the closest prior art, US 4,692,490, wherein the additional components, polybrominated 1, 4-diphenoxybenzene and antimony oxide, are present. Thus, the data of said Rule 132 Declaration still have little probative value, and the example B showing 7 parts of an organic clay is narrow than the actually claimed invention.

With respect to the property of a dielectric breakdown strength, the composition of Abolins having clays would have the recited "at least 21.1 kV/mm" as partially evidenced by the example C of Rule 132 Declaration. In fact, the example A without clays shows 42 kV/mm.

Choosing a specie from the list of species is considered a *prime facie* obviousness and an argument based on the inherent property of using said specie has little probative value absent unexpected result. Applicant's argument of a particular placement of mold gates and flow properties also have little probative since an invention in a product-by-process claim is a product, not a process. See In re Brown, 459 F2d 531, 173 USPQ 685 (CCPA 1972) and In re Thorpe, 777 F2d 695, 697, 227 USPQ 964 (Fed. Cir. 1985).

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Also, see *In re Mills*, 477 F2d 649, 176 USPQ 196 (CCPA 1972); Reference must be considered for all that it discloses and must not be limited to its preferred embodiments or working examples.

The method claims 5-8, 10 and 11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, first and second paragraphs, set forth in this Office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Monday to Thursday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

THY/May 6, 2003



TAE H. YOON  
PRIMARY EXAMINER